

REMARKS

Claims 1-5 and 9-11 are now pending in the application. Applicants submit that claim 10 has been amended only to correct typographical errors. No new matter is added by way of the amendment and its entry is respectfully requested.

Rejections Under 35 U.S.C. § 112, 2nd Paragraph

Claims 1-5, 9-11 were rejected under 35 U.S.C. § 112, 2nd Paragraph, as being indefinite in view of the different definitions of R_1 and R_2 in claims 1 and 10. Applicants submit that the obvious typographical errors in claim 10, wherein R_1 and R_2 were mistakenly not corrected to recite R_1' and R_2' in a previous response, have been corrected by way of this amendment. Applicants submit that no new search is required and respectfully request entry of this amendment. In view of the present amendments, the Applicants respectfully request the withdrawal of the rejections under 35 U.S.C. § 112, 2nd paragraph.

Rejections Under 35 U.S.C. § 103(a)

Claims 1-5 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Richter (WO02/096553) in view of Richter (US2004/0147396), or Blanch (AU 2002302117) in view of Kim (EP 1,094,065). The Patent Office contends that the claims differ from Richter or Blanch only in the specificity of the R_1 and R_2 groups. The Patent Office further contends that Kim discloses the recited R_1 and R_2 groups as suitable for packing materials in a chromatography column. Applicants respectfully traverse this rejection for reasons that follow.

Richter discloses a silica gel chromatography packing wherein the packing comprises a cucurbituril coating adsorbed onto a silica gel. Applicants submit that Richter only discloses that R represents hydrogen or C1-C5 alkyl (see paragraph [0014] of Richter US 2004/0147396). Kim discloses that cucurbituril (CB) may be used as a substitute for cyclodextrin and the CB is suitable for packing materials of a chromatography column. In the Office Action, the Examiner states "Kim (European Patent No. 1,094,065) (Abstract and page 9, line 7) discloses the recited R1 and R2 groups are suitable for packing materials of a chromatography column." Kim only discloses that "R1 and R2 are independently selected from the group consisting of hydrogen, alkyl groups of 1 to 30 carbon atoms, alkenyl groups of 1 to 30 carbon atoms, alkynyl groups of 1 to 30 carbon atoms, alkylthio groups of 1 to 30 carbon atoms, alkylcarboxyl groups of 1 to 30 carbon atoms, hydroxyalkyl groups of 1 to 30 carbon atoms, alkylsilyl groups of 1 to 30 carbon atoms, alkoxy groups of 1 to 30 carbon atoms, haloalkyl groups of 1 to 30 carbon atoms, nitro group, alkylamine groups of 1 to 30 carbon atoms, amine group, aminoalkyl groups of 1 to 30 carbon atoms, unsubstituted cycloalkyl groups of 5 to 30 carbon atoms, cycloalkyl groups of 4 to 30 carbon atoms with hetero atoms, unsubstituted aryl groups of 6 to 30 carbon atoms, and aryl groups of 6 to 30 carbon atoms with hetero atoms; and n is an integer from 4 to 20." Clearly, there is no disclosure in any of the cited references of the R₁ and R₂ groups of the presently claimed invention. There is no disclosure in Richter or Kim that renders the present claims obvious. Applicants submit that the correction of the typographical error in claim 10 renders claims 1-5 and 9-11 definite

with regard to R₁ and R₂ and distinguishes the present claims from all of the cited references. Thus, based on the above reasoning, Applicants believe that claim 1 is allowable and claims 2-5, depending from claim 1, are allowable for at least the above reasons. Applicants request that the rejection be withdrawn and that claims 1-5 be allowed.

Claim 3 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Richter (WO02/096553) in view of Richter (US2004/0147396), or Blanch (AU 2002302117) in view of Kim (EP 1,094,065), and further in view of Haase (5,276,062). The Patent Office contends that Haase teaches that the Amberlite XAD resins are the most preferred class of polymer for adding affinity compounds. However, Haase does not teach a curcubituril having the claimed R₁ and R₂ groups. Applicants submit that claim 3 is allowable and request withdrawal of the rejection.

Claim 4 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Richter (WO02/096553) in view of Richter (US2004/0147396), or Blanch (AU 2002302117) in view of Kim (EP 1,094,065) and further in view of Snyder. The Patent Office contends that Snyder teaches the particle-size range of the present invention. However, Snyder does not complete Richter because Snyder is silent as to the claimed R₁ and R₂ groups. Therefore, Snyder does not remedy the deficiencies of Richter or Kim.

Claims 1-5 and 9-11 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Richter (WO02/096553) in view of Richter (US2004/0147396), or

Blanch (AU 2002302117) in view of Kim (EP 1,094,065), and further in view of Duval (6,042,723). The Patent Office contends that the claims differ from Richter or Blanch only in reciting a product by process limitation of being formed from a reactive polymer. However, Duval does not teach the claimed R_1 and R_2 groups and therefore does not remedy the deficiencies of Richter or Kim.

Claim 3 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Richter (WO02/096553) in view of Richter (US2004/0147396), or Blanch (AU 2002302117) in view of Kim (EP 1,094,065) and Duval (6,042,723), and further in view of Haase (5,276,062). The Patent Office contends that Haase teaches that the Amberlite XAD resins are the most preferred class of polymer for adding affinity compounds. However, Haase does not teach a curcubituril having the claimed R_1 and R_2 groups. Applicants submit that claim 3 is allowable and request withdrawal of the rejection.

Claim 4 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Richter (WO02/096553) in view of Richter (US2004/0147396), or Blanch (AU 2002302117) in view of Kim (EP 1,094,065), and further in view of Snyder and Duval. As discussed above, neither Snyder nor Duval supply the teaching missing from the principle reference. Neither Snyder nor Duval relate to the claimed compound since neither reference discloses the claimed R_1 and R_2 groups.

Conclusion

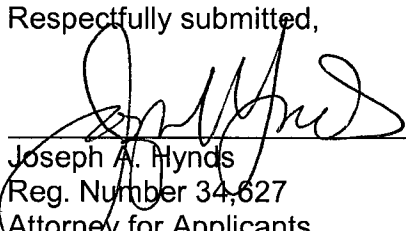
In view of the foregoing, applicants respectfully submit that all outstanding rejections have been overcome. Reconsideration and allowance are therefore respectfully solicited.

In the event the Examiner believes an interview might serve to advance the prosecution of this application in any way, the undersigned attorney is available at the telephone number noted below.

The Commissioner is hereby authorized to charge any fees or credit any overpayment associated with this communication, including any extension fees or fees for the net addition of claims, to Deposit Account No. 02-2135.

Respectfully submitted,

By: _____


Joseph A. Hynds
Reg. Number 34,627
Attorney for Applicants
ROTHWELL, FIGG, ERNST & MANBECK
1425 K. Street, Suite 800
Washington, D.C. 20005
Telephone: (202) 783-6040